

## AMENDMENTS TO THE SPECIFICATION

### In the Specification

Please replace the paragraph beginning on page 119 line 1 with the following amended paragraph:

"As shown in FIG. 38C, a ferroelectric ~~layer 1202~~ layer 3902, insulating layer 1203, and upper ~~electrode 1204~~ electrode 3904 may be provided on a metal plate ~~1201~~ plate 3901. In this structure, the ~~metal plate 1201~~ metal plate 3901 serves as a lower electrode layer. With the structure shown in FIG. 38C in which the constituent elements are formed on the ~~metal plate 1201~~ metal plate 3901 with high thermal conductivity, a higher cooling effect can be obtained, and a stable element operation can be expected."

Please replace the paragraph beginning on page 290 line 3 with the following amended paragraph:

"An example of a method of manufacturing the 3-terminal element shown in FIG. 106 will be described next with ~~reference to FIG. 10607~~ reference to FIGS. 107A to 107F. ~~As shown in FIG. 10607A~~ As shown in FIG. 107A, the p-type silicon substrate 10601 having a plane orientation of (100) on the principal plane and a resistivity of 1 to 2  $\Omega$  cm is prepared. The surface of the substrate 10601 is cleaned by a solution mixture of sulfuric acid and a hydrogen peroxide solution, pure water, and a hydrogen fluoride solution and dried. The insulating layer 10602 is formed on the cleaned and dried substrate 10601. In forming the insulating layer 10602, the above-described ECR sputtering apparatus and pure silicon (Si) as a target are used. The insulating layer 10602 in a metal mode by Si-O molecules is formed on the silicon substrate 10601 to a thickness to just cover its surface by ECR sputtering using argon (Ar) as a plasma gas and oxygen gas."

Please replace the paragraph beginning on page 351, line 15 with the following amended paragraph:

“The above-described hysteresis of the current flowing in the ferroelectric layer 104 can be regarded as being generated because the resistance value of the ferroelectric layer 104 changes depending on the voltage applied to the upper electrode 136, as described above. When a positive voltage  $V_{W1}$  with a predetermined magnitude or more is applied, the ferroelectric layer 104 changes to a "low resistance state" (data "1") wherein the current ~~hardly~~ easily flows. When a negative voltage  $V_{W0}$  with a predetermined magnitude is applied, the ferroelectric layer 104 changes to a "high resistance state" (data "0") wherein the current hardly flows.”